

REMARKS

Status of the Claims

With entry of the amendments listed above, claims 1 to 5 are pending. Without prejudice or disclaimer, claim 1 has been amended. Exemplary support for the amendments to claim 1 can be found, in the original claims and specification as-filed, including at least, for example, at page 9, lines 6-11 and page 10, lines 5-9. As such, there is no issue of new matter.

Rejections under 35 U.S.C. § 103(a)

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious in view of *Kawahara et al.* (JP-2004-099696). Specifically, the Office alleges that *Kawahara* “teaches a method for deproteinizing natural rubber latex (¶0001) comprising adding a urea denaturing agent (¶0008-09) and a surface active agent/surfactant (¶0015) to a natural rubber latex (¶0010); mixing and agitating the mixture (¶0028); and separating the denatured proteins from the rubber latex (¶0014).” Office Action at page 2. The Office admits that *Kawahara* “does not teach the mixing as occurring during the transportation through a fluid channel.” *Id.* Regardless, the Office alleges that such a limitation is obvious to one skilled in the art, citing MPEP § 2144.04. *Id.*

The Office has also rejected claims 1 to 5 as allegedly obvious in view of *Saito et al.* (Purification of Natural Rubber with Urea, Proceedings of the 16th Elastomer Forum of the Society of Rubber Industry, Japan, Published December 4, 2003) and Trautman (U.S. 5,777,004). Specifically, the Office alleges that *Saito* “teaches a method of denaturing natural rubber latex (page 1) comprising adding a urea denaturing agent and a surfactant to a natural rubber latex (page 1); and centrifuging the mixture at 10,000 G (page 1).” Office Action at page 3. While acknowledging *Saito* “doesn’t teach agitating the mixture,” the Office cites Trautman for allegedly teaching “agitating a mixture of a natural rubber latex and a denaturing agent.” *Id.* The Office supports this combination, alleging that Trautman is analogous art. *Id.* Further, the Office alleges it “would have been obvious to a person having ordinary skill in the art at the time of invention to have agitated the mixture of *Saito et al.* as in Trautman and the motivation to do so would have been, as Trautman suggests, to ensure complete hydrolysis of the proteins.” *Id.*

The Office admits that *Saito* “does not teach the mixing as occurring during the transportation through a fluid channel.” *Id.* Regardless, the Office alleges that such a limitation is obvious to one skilled in the art, citing MPEP § 2144.04. *Id.*

Applicant respectfully traverses both rejections. The Examiner has not considered the entire scope of the claim in making his rejection. Currently pending claim 1 recites that the “the proteins are sufficiently denatured in 5 to 10 minutes.” This time element is not found in any of the references that serve as a basis for the 103(a) rejection. In fact, the process of each cited reference takes place over a timeframe of at least one hour. The addition of the surfactant and urea to flowing raw natural rubber latex, as presently claimed, is understood to create a turbulent flow that quickly stirs the mixture. It is this turbulent flow that allows the proteins and denaturing agent to contact each other in a short time, greatly reducing the overall time of denaturing the proteins. The Office relies on MPEP § 2144.04(V) to support the conclusion that converting a batch process (e.g. the processes of *Kawahara* and *Saito*) into a continuous process is within the knowledge of one skilled in the art. However, Applicants submit that that one of ordinary skill in the art would not have expected such a great reduction in the time for substantial denaturing of the proteins, based on what is taught and known in the art. As such, Applicant respectfully requests that the rejections under § 103(a) be withdrawn.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

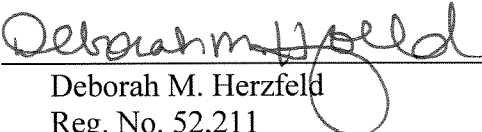
If the Office believes a telephone conference could be useful in resolving any outstanding issues, it is respectfully invited to contact Applicant’s undersigned counsel at (202) 408-4368.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: December 30, 2008

By: 
Deborah M. Herzfeld
Reg. No. 52,211